The
Journal of Educational Sociology
A Magazine of Theory and Practice

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The Journal of Educational Sociology

A Magazine of Theory and Practice

PERMANENT DEPARTMENTS

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CONTRIBUTORS' PAGE, B. F. STALCUP, *Editor*

A department presenting a short biography of each writer in the current number of THE JOURNAL for the purpose of making the readers better acquainted with the contributors of the articles.

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EDITORIAL

THE JOURNAL OF EDUCATIONAL SOCIOLOGY *is glad to offer its editorial columns for the discussion of a moot point in Professor Rapeer's paper published in January.*

"THINKING" IN THE SOCIAL SCIENCES

May I definitely call in question one statement made by Mr. Louis W. Rapeer, in his article on training the nation to think, in the January JOURNAL? And, in so far as the validity of this one statement defends the validity of his whole article, may I call in question that article? A technique of thinking is not something *natural;* it is an invention growing out of one's philosophy. This particular statement of Mr. Rapeer's reveals him as an adherent of a particular type of social philosophy. The statement in question is plausible; leaving it go unquestioned would seem to be to permit a byway, now somewhat overgrown, to be thought a main highway. A logic of the social sciences is now the greatest need in those broad fields. Mr. Rapeer's statement seems to me to lead, not to a useful logic for the frontiersman in the social sciences, but to something very different, something to be warned against.

On page 290 of the January JOURNAL, he says: "You can get no better idea or answer in your conclusion than you have put into your list of hypotheses." This is the statement that I must question.

Much so-called "social science" accepts Mr. Rapeer's dictum. That I will admit. But I put such "social science" in inverted commas. To assume that you can get no more out of your problem than you put into it already made is to assume that you learn nothing by a study of problems—which is, of course, not far from the truth! This is a convenient method for the schoolman, especially the public-school man, who does not quite dare risk getting too close to realities himself, and who must never upset the folkway attitudes of the students

save within safe bounds that have been determined beforehand. It is also not altogether foreign to the "thought processes" of the "practical" man, who is never much disturbed by problems, who is never hospitable to theory, and who is rarely driven from his "rules of thumb," even when those rules fail. In other words, this statement grows out of an academic type of thinking technique, not out of a technique that belongs to the logic of science.

It is of the essence of modern science that the *problem* shall provide, in the processes of analysis and creative synthesis, *its own eventual answer.* A "problem" that finds its satisfactory solution in an antecedent hypothesis is not a problem, in the logical sense, at all; it is merely an academic example, set up to try the wits of the pupil. I do not mean that the type of "problem" that Mr. Rapeer cites from the high-school work in history at Washington, Indiana, is worthless. It is at least a bit of a break from the scholastic grind of committing details of history to memory. But it is merely the old "problem method" of teaching which, to my knowledge, was puzzling the wits of high-school pupils, to no enormous profit, in Seattle twenty years ago; and presumably elsewhere, too. It was the last preceding method whose passing ushered in the "project."

If, then, social science can get no closer to its problems than to poke around in them with preëxistent hypotheses, it might well close up shop and go home. Physical and biological science did not get ahead that way; the chemist and the biologist do not put final hypotheses into their problems; they get their hypotheses out of their problems. That mental set which is the approach to a problem for most of us must yield to the findings; we must get our science out of our problems. If we don't get a better idea or answer out of our problems than we put in by way of hypothesis, then we are either merely standing still or running round in circles. Maybe that's what social science is doing these days!

JOSEPH K. HART

PRESIDENT RAPEER'S REPLY TO DR. HART

I appreciate Dr. Hart's attention to my article and should like to take the space here to illustrate the application of the thinking technique to reasoning on the everyday problems of life. There we dealt with its application to the reflective history lesson; but the method of judging by comparison of pairs of hypotheses—or suggested ways of solving a problem—had not yet been invented when the experiments in class teaching were made. Omitting much, then let us answer Dr. Hart's strictures.

I see no penetrating criticism in his statement. Dr. Hart is evidently writing of some figment of his imagination or painful experience and hardly roams into the neighborhood of this technique. I crave penetrating and incisive criticism, but a few unsupported opinions on

the general subject get us nowhere. Our sincere aim is to advance the science of our profession and to help every researcher by the most drastic criticism possible, pro and con. To say that the thinking technique is not new is like telling a mother that her twenty-year-old daughter is not her child. The mother knows well the birth pangs and the long years of guided growth and development. So I stare at Professor Hart in similar consternation and wonder if he is familiar with logic, psychology, or education in this field. Let him tell us where he can find described this pattern of reasoning and, especially, where any one has ever discovered or invented this method for the steps of testing and judging. He cannot.

Dr. Hart's main contention seems to be that I am wrong in the statement quoted that "You can get no better idea or answer in your conclusion than you have put into your list of hypotheses." This fact appears as obvious to me as the one that you can get no more money out of your purse than you have put into it, or that you can check out no more money from the bank than you have deposited to your account. He does not seem to realize that we have only ideas (suggestions, conjectures, hypotheses, suppositions) by which to solve problems. Reasoning is mainly the process of getting and selecting hypotheses. In our step two we find every way of solving the problem we reasonably can. Our answer must be selected from this array by testing and judgment. We can get these ideas only from our experience and from others. You certainly are not, for example, going to choose as a route to another city one of which you have never heard, "entertained," "captured." If you have found this way and possess it to compare with others in judgment, then only can you use it as your answer, of course. Dr. Hart writes as if Einstein, say, could report as his conclusion as to the nature of space and time an idea (theory, belief) of which he had never thought—that he could magically extract a bunny that wasn't in the hat. What he is talking about, if this doesn't answer him, I don't know.

In general, this is the only technique of thinking that follows very intimately and closely the natural pattern of the mind's movement in reflective thinking or reasoning. It is, therefore, basic in teaching children and adults how to think and fundamental, yea, indispensable, in any research and development of the social or natural sciences. The need is to make it a *conscious* process and a ready habit. You are faced by a problem, whether of buying a fountain pen or of discovering the influence of environment in producing genius; how are you going to solve it? You make a list of all the possible ways it can be solved. Your answer has to be one of them; doesn't it? Then bring forward steps three and four of the technique to test and select the best. Here, say, are the five and only kinds of fountain pens that may meet the specific conditions of your problem. It must be one of the five. Find it. That is the way we think; and all the king's horses and all the king's men will not make the answer *another* pen *outside*

the five. Could anything be simpler? What Professor Hart means by "antecedent" or "preëxistent" hypotheses only he probably knows.

If educational sociology is going to amount to anything it must have men building it who can *think*—not just sprawl vague sentences on paper for articles and books. The recently edited books by Gee and Rice on the "methods in the social sciences," e.g., fail lamentably to help much since they do not set forth the basic factor in research—how the mind operates in solving problems. Here it is, in this technique, using either the abreast or tandem handling of ideas (or a combination of the two); and we shall solve our national and international problems now untouched only as we learn the natural pattern of thinking and follow it closely in a technique that helps the mind perform.

So I must conclude that Dr. Hart has thrust his lance against a knob in my armor instead of a joint.

LOUIS W. RAPEER

REPORT OF COMMITTEE ON STREET PLAY

WILL R. REEVES

Actual statistics, of course, do not exist showing the extent to which the streets are used for play by children. General observation indicates a widespread use. Doubtless, with the increase in urban living in this country, street play becomes more frequent and also more dangerous.

Recreational surveys made in many cities by the National Recreation Association have observed and studied street play. In 20 cities, for instance, observations of children have shown that from one half to nine tenths of the children seen were in the street, the average being nearly 67 per acre, the percentage of children on the street equaled affects the amount of play space, seems to have little relation to the number of children actually in the streets. In Kansas City, where the average density was 6.5 persons per acre, the percentage of children on the street equalled that found in Providence or Richmond, with their average density of 19.1 and 22.9 persons, respectively. Even if the children are not compelled to play in the streets through actual congestion, they are apparently inclined to do so, unless a strong counter-attraction is provided.

Similar observations were made to learn what these children were doing in the streets, yards, parks, and vacant lots. In the table on page 608 it must be remembered that "playing" includes pitching pennies, fighting, shooting craps, chasing chickens, tying a can to a dog, or "just fooling," while "idling" means actually doing nothing, merely sitting or standing around; this division is made on the basis that even slapstick "playing" is preferable to a state of apathy. The children walking through the districts with an air of "going somewhere" were included in only two cases.

Although statistics have been taken in only a few of the surveys, it is found that, of the average 40 per cent of children who are listed as playing, the percentage of these engaged in organized games is small. In Scranton,

	Walking Per cent	Working Per cent	Playing Per cent	Idling Per cent
Tampa, Fla.	..	8	26	66
South Bend, Ind.....	..	11	54	35
Sioux City, Ia.....	..	10	41	49
Portland, Me.	11	7	47	35
Ipswich, Mass.	..	5	28	67
Waltham, Mass.	..	11	42	47
Detroit, Mich.	..	7	38	55
Eveleth, Minn.	..	8	24	68
Kansas City, Mo.....	..	12	37	51
Montclair, N. J.....	..	5	56	39
Newburgh, N. Y.....	..	13	38	49
Yonkers, N. Y.....	..	15	50	29
[1]Cincinnati, Ohio	..	13	41	46
Cleveland, Ohio	..	9	61	24
Toledo, Ohio	11	..	50	41
Scranton, Pa.	..	..	38	62
Providence, R. I.....	..	14	32	54
Fort Worth, Texas....	..	9	44	47
Richmond, Va.	..	12	..	65
Milwaukee, Wis.	..	19	31	50

These figures show that from one fourth to two thirds of the children seen were doing absolutely nothing, the average for the twenty cities being 49 per cent. This estimate is conservative, since in compiling this report the benefit of slight indefiniteness in any survey has been given to play.

where 33 per cent of the number observed were playing in some manner, only one third of these were seen in organized games, such as quoits, baseball, dramatic games, etc.; the rest were hoop rolling, roller skating, bicycling, or engaged in some form of the demoralizing "play" mentioned above. In Ipswich, Massachusetts, where a little over one fourth of the children were playing, only 11 per cent of these were playing organized games, football being most popular at the time of observation. This small percentage of organized games is partly due to the fact that a large proportion of the playing is done on the streets and alleys or in private yards where organized games are difficult or impossible because of traffic or restricted space; in Scranton 40 per cent of the children were on traffic

[1]No record made of where seen.

streets. Undirected street play tends to develop disrespect for law and cunningness in social relationships; these developments are fostered when crowded streets permit only disorganized fooling in the line of play. In San Francisco, inquiries among the school children brought forth answers from 13 per cent that they never played and from 46 per cent that they played in the streets.

It is not surprising to find that about two thirds of the children seen in these observations are boys. It is also true, of course, that the majority of the children are between the ages of six and fifteen. In Cincinnati, where the observations were apparently confined to the streets, 50 per cent of the children were between ten and fifteen years old, and the investigator made the significant comment that 47 per cent of all cases brought before the Juvenile Court were between these ages.

Some of the street activities are revealed by the following instantaneous census:

Playing ball
Jumping rope
Marbles
Handball
Matching picture cards
Bouncing ball
Playing with balloons
Walking
Tag
Sailing boxes in the gutter
Riding bicycles
Riding velocipedes
Playing with paper boxes
Taking care of baby
Running around
Roller skating
Marking pavement with chalk
Pavement checkers
Gathering wood
Playing with doll
Building fire
Playing with old tire
Sweeping street
Stoop ball
Selling papers
Buying candy at stand
Newspaper fight
Playing cards
Playing on cellar door
Bootblack
Watching motorcycle
Hopscotch
Playing with dog
Hitching on to autos
Basketball
Pass ball
Hoop rolling
Fencing with sticks
Tip cat
Riding hobbyhorse
Climbing fence

A study made in 1929 of street games in New York City between the Battery and the Bronx showed that about 150

games are played. The most popular games, it was discovered, are those in which a ball of some kind is used. Such games as stick ball or baseball, handball, punch ball, basketball, football, street checkers, and hopscotch are the most attractive to the majority of boys and girls. The children have made their own rules to meet the conditions of the locality in which they live. They do not, for example, play the regular baseball type of game, but use a small rubber ball two or three inches in diameter, and strike it with the hand or stick instead of a bat. Bases are marked out and the rules of regular baseball applied. It is obvious that football cannot be played on the sidewalk, so the boys substitute touch football. During the basketball season one may walk down almost any street in the city where there are large numbers of boys and see an old barrel hoop or a tomato basket attached to the side of a building serving as a basketball goal.

Street checkers is played in much the same way as marbles. A chalk diagram is drawn on the sidewalk with numbered squares, the checker is placed in square number 1 and flipped with the fingers to square number 2 and so on. The checker must slide into the square to assure a consecutive turn. The winner is the player who reaches the last square first.

The ten most popular games were:

Baseball	Punch ball	Handball	Stick ball
Basketball	Football	Box ball	Ring o'lives
Soccer	Volley ball		

Street play is, of course, hazardous in these days of automobiles. Figures compiled by the National Safety Council, showed that, in 1929, automobile accidents to children totaled 180,000.

A number of cities have adopted a policy of setting aside streets for organized and protected street play. Thirty-six cities in 1929 closed up 165 streets for play under leadership in this way, according to figures sent in for the 1930 yearbook of the National Recreation Association.

Attendance at 105 of these streets was reported to be over 720,000.

Some social workers have feared the effect of protected play streets on children, doubting whether the small children would be able to remember the particular periods and the particular days when the streets are guarded from traffic, and fear that children once having acquired the happy habit of playing in the street may be less careful and, therefore, more subject to accidents. Many, too, feel very strongly that the use of a makeshift provision such as a play street may reduce the likelihood of securing real playgrounds.

In spite of these difficulties and fears, the play-street policy has been definitely adopted by a number of cities and the experience in Cincinnati, for instance, has made it seem worth while to report their experience somewhat at length.

In 1920, the need for play streets for the children of Cincinnati was made known to the city authorities. Upon recommendation of Cincinnati Community Service, the recreational agency of the Community Chest, the mayor and the city solicitor authorized the closing of ten streets for play between the hours of 6.30 p.m. and dark for the period of the summer vacation. At a later period this action of the mayor and city solicitor was confirmed by an ordinance of Council.

The play streets were selected on the basis of

1. Child-population congestion
2. Traffic flow
3. Surface conditions
4. The attitude of the majority of the people residing on the streets

As is the case with everything new, considerable opposition was at first encountered and many weeks were expended in obtaining the approving signatures of the majority of citizens. An interesting gauge of a changed public opinion is the fact that after ten years of this service

committees from practically every section of the city—better residential districts as well as the downtown congested districts—are petitioning for supervised play streets not only during the vacation period but throughout the spring and fall.

No funds being available for supervision the first year, it was necessary to operate the streets with volunteer play leaders. Community Service supplied the official barricades, signs, red lanterns, street showers, and play equipment.

One year's experience disclosed the fact that, unless paid supervisors could be employed, the streets would have to be closed. The volunteers, however civic and socially minded, could not be relied upon for continuing an efficient service. In 1921, Community Service was allowed sufficient funds to provide trained male and female play leaders at each location. At no time since has a play street been operated in Cincinnati without two trained and paid leaders in charge. Upon the establishment of the Public Recreation Commission on January 1, 1927, the play streets were transferred to public control and supervision.

It was believed at first that play streets would only be operated until the city could provide adequate playground service in every community. This belief was based on an optimism that no longer can be justified by actual facts. The almost complete disappearance of the open places in our large cities, the great increase in the number of motor-driven vehicles on the streets, and the increasing cost to taxpayers in providing adequately sized and properly landscaped play areas for all the children and young people, along with the continually rising standard of the people concerning the lengthening time period these facilities should be employed, has changed our opinion of play streets as a temporary substitute for regular playgrounds.

Recognizing conditions as they are, and not as they might be, we now believe that to such public play facilities as the play field, the neighborhood playground, and the

school playground should be added the public play street, an additional public recreational area where, with the consent of the majority of the residents and under paid and skillful supervision, a safety zone of play is provided for the children of the immediate neighborhood.

The best that can be said for play streets is poor indeed when we consider their inherent disadvantages. Concrete streets, brick walls, and a street shower are a far cry from the woods, the fields, and the crystal stream—the play areas of former generations in this country. It is depressing environment even when compared with a properly equipped and landscaped playground, but it is at least a place where chidren can play without danger of accident or death, and where, under trained supervision, such play, given a long enough period of time, may become a contributing means to improve public health and an educational factor for decency and order in all human fellowship relations.

In Cincinnati, therefore, the supervised play street is considered a permanent public-recreation facility. While the location of the streets may be changed because of contemporary circumstances, the policy of supervised play streets is accepted as fixed. Therefore, as increased maintenance funds become available, the operating time period will be lengthened to include the long twilight hours in the late spring and early summer and additional strategically located play streets will be added.

For the past three years and at the present writing, Cincinnati play streets are operated under the Public Recreation Commission as follows:

1. Official barricades with city police signs designating the street as a play street are set out at both ends of each street promptly at 6.00 p. m. These stanchions do not extend from curb to curb as residents on the streets are permitted ingress and egress. Other automobile drivers who ignore the signs are arrested and fined. As soon as it becomes close to dark, the lighted lanterns are hung on the barricades. The streets are closed to play at 9.00 p. m. The supervisors are held responsible for the use and care of the barricades, lanterns,

street showers, and play equipment. All this paraphernalia is stored with a resident on the street.

2. No hard ball or soft ball is permitted on these streets. The games are limited to volley ball for the older boys and men; kick ball, captain ball, and center ball for the girls and young women; long base (substitute for baseball) for the smaller boys; and singing, games, circle games, and story-telling for the little children. Hand equipment is provided for jackstones, checkers, modified quoits, hopscotch, O'Leary, beanbag throw, and numerous other small group and individual games.

3. When the surface permits, all major games areas are marked off with granolite, one treatment lasting for the summer period.

4. Every regular participant, junior or senior, is registered. The registration card carries the sex, name, age, and address. A child must register on a play street or playground. No interchange of registration is permitted.

5. Every street is provided with a bulletin board on which newspaper clippings, bulletins, games rules, etc., are posted.

6. After the second week of operation, regular teams in senior and intermediate volley ball, intermediate kick ball, and intermediate and junior long base are organized and scheduled for interplay-street games. Every "travelling" street team must be accompanied by the play leader, expecting the senior volley-ball team. All interplay-street games are played for the play-street championship silver cup. The Junior "C" emblem given for good conduct, good sportsmanship, and athletic ability is awarded on the basis of one for every fifty registered boys and every fifty registered girls.

7. Two trained gypsy story-tellers are sent twice weekly to each play street. Transportation is furnished for these story-tellers by the service clubs (Kiwanis, Rotary, Lions, etc.).

8. The Travelling Theater with a program for both adults and children visits each play street five times during the summer. It is not uncommon for these amateur actors, singers, and instrumentalists to entertain an audience of some 800 to 1,200 people, most of whom stand throughout the performance, and many of whom occupy "box seats" in the tenement-house windows. Many of these people tell us their only theatergoing experience is with the theater-on-wheels.

The Travelling Theater is also our propaganda and educational medium. From the stage and *before* the performance we speak of the ideals and purposes of the Recreation Commission, the recreational neighborhood needs, sportsmanship standards for spectators as well as for participants, the obligation of the "hostess" street to visiting players, the way to act when a game is won—and lost—and even go so far as to touch on religious tolerance when the need is obvious. Recreational tax levies and bond issues for recreational purposes also come in for their share of the discussion.

9. Just before the street is closed on hot nights, specially constructed street showers are attached to the street fire hydrant and the children enjoy a shower.

As part of this brief paper, I am including a letter sent

to the city manager by a taxpayer who acted as volunteer chauffeur for two of our gypsy story-tellers.

THE U. S. PAPER GOODS COMPANY
CINCINNATI, OHIO

August 4, 1927

Colonel C. O. Sherrill
City Hall
Cincinnati, Ohio

My dear Colonel Sherrill:

Last night it was my privilege and extreme pleasure to serve as chauffeur for two charming young ladies, clad in traditional gypsy costumes, who went to various of the "play streets" in the city telling stories to groups of little folks.

The experience was a revelation to me, and I imagine it would be equally so to the majority of our citizens, who, I imagine, have no conception of the good work that the municipal government is doing for the children and young people in the underprivileged districts, through the Public Recreation Commission.

The activities of one, Walnut Hills Street, were typical of all those visited. When we arrived at the barricaded head of the street, the intense animation that greeted our eyes reminded us of one of the congested streets on New York's East Side—but with this great difference; the activities here were organized activities under the skillful direction of a young man and young woman—trained members of the Public Recreation Commission staff.

At one end a large number of small boys was engaged in some sort of a game, the identity of which escaped me—but whatever it was, it was being played in earnest under the eyes of one of the supervisors.

A little farther down the street a net stretched between two conveniently located telephone poles separated two teams of older boys and young men playing volley ball. As we watched, a truck pulled up at the lower end of the street and the game, which was evidently a practice game, ceased. A group of six or seven young men gathered around the supervisor for instructions; then they climbed into the truck and drove away—evidently to measure volley-ball skill with some picked team on a new play street in some other section of the city. Immediately upon their departure, new groups took their place on the volley-ball court and another game was in progress.

At the far end of the street, where they were safe from being trampled under foot by the strenuous ball players, were the little tots—children from two years up to nine or ten. They too were busily engaged in organized games of various sorts, but when they spied the gypsy story-tellers, games were forgotten as they rushed towards us—evidently the gypsies were prime favorites here. In less time than the telling takes, a group of 75 or 100 little folk were seated—on the curb, in the street, everywhere—grouped around the story-tellers.

Training they may lack, home environment may be nothing to brag about, but they were certainly not lacking in respectful attention as the tale of "The Wise Old Woman and the Goblins" or "Princess Sweet Tooth and the Mince Pie" was unfolded to them. All eyes were glued on the story-teller and the group of children shivered with delighted horror, wept with sympathy, and shouted with rapturous joy when the goblins were finally routed and the beautiful princess was restored to her prince.

And all around in the background was an ever-growing fringe of grown-ups, tired, worn mothers, old grandfathers, black and white, who were drawn near by curiosity and stayed to enjoy the stories, with pleasure scarcely less evident than that of the children.

All too soon for the children the story period came to a close and the gypsy story-tellers were on their way to another street where the scene was reënacted, and so on until long after darkness had fallen.

En route from one play street to another in the West End, we passed yet a third, where another phase of the Commission's activities was just getting under way—the Travelling Theater. Time did not permit us to stop, but from the size of the assembled crowd it was evident that the roaming players, who, I understand, donate their services as do the story-tellers, were assured of a welcome.

I am of the opinion that too few of Cincinnati's citizens know anything about this angle of the municipal activities. It has not had the publicity it deserves because it is doing a far bigger thing than merely bringing a measure of enjoyment into the lives of children who have far too little of it—it is providing an outlet for youthful spirit and enthusiasm and guiding them in channels that are bound to make for better citizenship.

Now, just two typical incidents and I am through. I point them out because to me they seem to illustrate just what this work is doing.

At one of the streets, three young girls, scarcely out of their teens, one holding a tiny baby in her arms, drifted into the group around the story-teller. Probably the story didn't interest them—it wasn't intended to—but the story-teller did. Not a detail of her appearance or actions escaped them. "Isn't she sweet," asked one. "Not a bit stuck up either," said another. "It must be awful nice to be able to go round and do things for people like that," said the third.

No envy—no sneering remarks. Only a wistful desire to emulate, and a sincere appreciation of sincere efforts. Wasn't the germ of something worth while being sowed here?

And on a street in the black belt where the little ones sat round-eyed and open-mouthed as they drank in the stories, one old Negro with gray locks, who looked as if he might have stepped out of one of Joel Chandler Harris's stories, limped up to the writer and said, "They is doing a great thing for our kids," indicating the story-teller with a wave of his cane. "We appreciates it, too, down here."

To those of us whose contact with our city government is derived in the main from reading about police court and city council in the newspapers, with, perhaps for sauce, a visit to City Hall for the

purpose of paying for the privilege of parking too long in one place, such an experience as mine might be highly illuminating, and might be the means of forming some new opinions about the city government. May the good work continue.

Very truly yours
(Signed) R. M. FLEMING
Advertising Manager
The U. S. Paper Goods Company

Play-street registration and attendance in Cincinnati, for the year 1929, on streets open from June 24 to September 7 on Monday, Tuesday, Wednesday, Thursday, and Friday nights, from 6.00 p.m. to dark, is as follows:

	Registered		Attendance		
	Boys	Girls	Boys	Girls	Adults
1.....	125	110	3234	2984	1615
2.....	100	92	2438	1846	650
3.....	90	100	2136	2488	....
4.....	80	83	2523	2338	2673
5.....	125	51	5458	5392	2869
6.....	227	136	3950	3200	714
7.....	311	575	5673	10554	2781
8.....	198	235	2664	3780	2114
9.....	81	20	2545	3646	2588
10.....	174	176	4431	3510	2487
	1511	1578	35052	39748	18491

Play-street leaders are paid at the rate of $2.50 per evening. Assistant play leaders receive $2.25 per evening. The total cost of supervision per week per play street is $23.75.

It is very difficult, if not almost impossible, for any administrative public-recreation group to determine the character-building values of the recreational activities under its jurisdiction.

Character is an intangible thing that cannot be measured with a physical yardstick. As recreational authorities, we cannot afford to be dogmatic in the assumption that character building is a concomitant of supervised play.

Loose statements not substantiated by a definitely proved body of facts over a long-time period serve to defeat our purpose. I believe, however, that we are on firm grounds in stating

A. Recreation is neither inherently moral nor immoral. It may be either, depending upon the type of leadership provided or volunteered

B. Children and young people cannot be in two places at the same time

Public-recreation authorities are convinced by actual field experience that skillfully trained, adequately paid play leaders of high character not only *do not permit antisocial character standards* and practices on the athletic field and playground, but, what is more important, given a long enough period of time, are an investment that will yield a return in more justice, fair play, self-control, and a finer sense of honor and modesty in each individual youth.

Every one will further admit that a boy cannot shoot craps and play baseball at the same time; steal an automobile and play a regularly scheduled game of basketball; commit a burglary or engage in a hold-up and play a regularly scheduled game of football at the same time. We can further agree, I believe, that to the normal, average boy, football, baseball, and basketball have a stronger appeal than the antisocial acts cited. However, that is beside the point—*a boy cannot be doing two different things at different places at the same time.*

Therefore, the more boys and girls we enlist in regular teams and keep playing under an agency that not only makes the schedules, provides the officials, checks up on the forfeited games, but insists upon the maintenance of high standards both for players and leaders, the fewer boys and young men we will have appearing in the juvenile court and before police-court judges.

The most that can be said, therefore, for the character-building influences of supervised play-street activities, is: Given sufficient funds to provide the right kind of adequate supervision and a period of years in which to build up and fortify the inherently decent character attributes of the average youth through the increment daily acquired under right and continuing leadership—and most of our play-street children will develop enough resistance power to choose right practices over wrong practices.

THE TIDE IS TURNING

ROSS L. FINNEY

A conspicuous phase of the intellectual life of America during that part of the new century through which we have already passed has been to introduce the techniques and methods of exact science into the mental and social fields. Such a movement was in a sense predestined, in view of the stage to which the natural sciences had advanced. Laudable is almost too obvious an adjective to apply to such a movement in our day; it was inevitable! And it was equally inevitable, no doubt, that such a movement should become involved in certain incidental fallacies and minor aberrations. Nothing good is ever perfect. It was equally inevitable, therefore, that a time should shortly come when the ever shifting searchlight of intellectual attention should chance upon those fallacies and aberrations and expose them. And who can fail to welcome such a contribution! That time has now arrived, judging from a new note that is distinctly discernible in the current literature of the movement. To point this out by reference to several recent books and articles is the purpose of the present paper.

The first of these is Eddington's *The Nature of the Physical Universe*. For our present purpose there are three aspects of this book that seem significant. The first is the fact that, scientist as he is, he is frankly unashamed to display an interest in philosophical questions. There is no vagueness in his mind as to where physics leaves off and metaphysics begins; but for his metaphysical interests he is quite outspokenly unapologetic. He accords to metaphysics a field as dignified and worthy as his own. He proffers his findings in the field of physics as data for the metaphysician, and even goes so far as to suggest a metaphysical interpretation of the same. He knows exactly where he

stands and what he is doing; but what he is *not* doing is to affect a self-conscious, pedantic unconcern for metaphysics. In this he is quite outside the mores of the current science movement in the mental-social fields. And yet, who is a greater scientist than he?

In the second place he quite repudiates the current assumption of mechanistic determinism. It was recently the privilege of many Americans to hear Professor Eddington over the radio. His spoken English, by the way, was delightfully terse and chaste; apparently there is no fear upon his part that the use of choice and polished diction will discount him as a scholar. In that address he declared that he had searched diligently through the physical universe for evidence of mechanistic determinism, but that he had been entirely unable to find any. He says the same thing in substance in his book. Apparently the a priori assumption of mechanistic determinism, which so many disciples of the science movement in sociology have taken as the A B C of science, will have to be abandoned.

The third aspect of the Eddington book that seems significant is its enormous popularity. From this fact it could seem to be inferred that the intellectual public of the English speaking world is hungry for something scientific that goes beyond the assumptions, techniques, and conclusions of the sort of science that confines itself religiously within the strictest definition of that term. It would appear fairly safe, therefore, for sociologists and educationists to venture somewhat outside such narrow limits.

The second book of special interest in the same connection is *The Biological Basis of Human Nature,* by Professor H. S. Jennings of Johns Hopkins University. No American stands higher as a scientist than he. And yet in that book the same principles are set forth as in the Eddington book. In the first place he makes no apologies for extra scientific questions or quasi-philosophical techniques. As illustration of the former are his speculations as to the nature of the self; of the latter, his delightful handling

of the heredity-environment dilemma and of the monogamy problem.

In the second place he repudiates the deterministic assumption of the current science cult as ruthlessly as Eddington. This he does in his introduction of the term "emergent evolution." He also argues against determinism in the name of the scientific method itself. He contends that it is the business, and that therein lies the very promise, of science as such to explore and experiment instead of taking anything for granted a priori. Mechanistic determinism he brands as just such an a priori assumption. In this connection he suggests that there may be some things to find out, biologically and psychologically, about man that cannot be found out by studying rats and little chickens, because "emergent evolution" may have introduced something into the composition of man that does not exist at all in any of those lower organisms, thus vitiating the assumed analogy. He objects to Watsonian behaviorism precisely on the ground that its deterministic assumptions are unscientific. And, by the way, it seems surprising how many recent writers who purport to be scientific go out of their way to criticise Professor Watson. One infers that behaviorism must be going somewhat out of fashion.

So much for recent books; but there has also appeared lately a battery of magazine articles that are significant. The first of these was by Dean Christian Gauss of Princeton and appeared in *Scribner's Magazine* for May 1930, under the title of "The Threat of Science." In this article Dean Gauss restates the old distinction between means and *ends,* things and *values,* which Professor James declared to be a distinction as old as Plato. But Dean Gauss and the editor of *Scribner's* appear to feel that it will bear repeating in this "century of science." The gist of the dean's warning is expressed in his terse remark that "there are other cherishable forms of truth (aside from science) at which highly civilized men have warmed their hands." The "threat" of science is that the essential values of life

will be overlooked and disparaged at the dictates of the science cult. He contends that the economist, the sociologist, the historian, and all other social scientists should concern themselves not only with objective data, but also with questions as to what is just and what is unjust, what is good in human life and what is bad. And he adds: "It should console them more than it now does to know that by this same act they step over into philosophy. This used to be a quite creditable profession and it would help to clear the air if we so regarded it again."

The next article is in the *The Atlantic Monthly* for August, and is entitled "Can Science Control Life?" It is by Lawrence Hyde, whom the editor introduces as "a young Englishman whose book, *The Learned Knife,* has enjoyed a *succès d' estime*—a volume defending a religious and aesthetic attitude towards life against the claims of science." Hyde makes the same distinction that Dean Gauss makes in the *Scribner's* article and follows it with virtually the same warning. He futhermore contends that the attempt of sociologists to be strictly scientific, which leads them to stress the study of things, causes them proportionately to neglect the study of values. This, he says, is not only because values are intangible, and hence unmeasurable, but also because they can be apprehended only through the individually clouded lenses of subjective sentiment. He goes one step further and points out that this avenue of discernment necessarily introduces what might be called a subjective refraction into all study of values, a potential fallacy which the would-be scientist is committed in advance to overlook. Hence the necessity for philosophy, if such data are to be studied at all.

The above distinction between things and values was elaborated by the present writer in *Educational Administration and Supervision* for March 1930. That article was provoked by the Freeman-Kilpatrick debate at Cleveland two years ago, in which Professor Freeman betrayed a complete failure to apprehend the implications of the Plato-

James distinction, while Professor Kilpatrick pressed them far less insistently than he might have done.

The last article to be mentioned here appeared in the *Sigma Xi Quarterly* for September 1930. It is entitled "What is Science?" and was the presidential address of Dr. C. M. Jackson before the Minnesota chapter of the society of the Sigma Xi. Professor Jackson is a member of the medical faculty at the University of Minnesota and enjoys the reputation locally (not to say elsewhere) of being one of the most outstanding scientists on the Minnesota campus.

Professor Jackson accords his approval, incidentally, to antideterminism, but the major interest and significance of his address for the present purpose is in his generous delimitation of the field of science. He says: "The nature of science is a theme demanding our attention because of an important matter of policy which is now pending. The question is what branches or fields of knowledge shall be considered as science, in which investigators may be recognized as eligible for membership in our organization?" He makes the familiar distinction between science and philosophy but declares that there is some of both in all branches of knowledge. In short, he answers his own question so generously as to include psychic and social scientists as eligible, not excluding those who employ the philosophical technique. From which it would appear that sociologists and educationists may study human values philosophically hereafter without self-conscious apprehension.

Judging from Dr. Jackson's address there is an almost inevitable ambiguity in the very word science itself. It appears that the strictest definition of the word is not the only one permissible. Therefore, the attempt to live up to too strict a definition is apt to degenerate into a thankless work of supererogation, and even to betray undignified inferiority complex before associates of the Dr. Jackson type. But what is far more serious is that, by so doing, psychologists, sociologists, and educationists turn their

backs upon the most important parts of their own fields, as Gauss and Hyde contend; and that becomes an actual obstruction to science.

Sociologists have long observed the phenomena of mental epidemics and mob crazes; but there is little or nothing in our textbooks to the effect that the intelligentsia are about as susceptible to intellectual fads and fashions as are the ignorant masses themselves. But they certainly are! The field of pedagogy is replete with them. And who would venture to contend that the scientific movement itself has been completely free from such phenomena. On the contrary, it will have to be admitted that the movement to scientize sociology and education has displayed, albeit as a by-product, several of the typical characteristics of a veritable religious cult; an unbounded faith in its own efficacy, a mythology of unverified assumptions, an intolerance towards nonconformists, and sometimes an actual flair for persecution. But apparently the tide is turning.

EDUCATION AND LABOR'S REWARD[1]

J. FRANK DAY

The law of balance or of variable proportions must be understood before insight into the problem of distribution is possible. Indeed, one might say insight into any major economic, social, or educational problem is impossible without such knowledge. The factors of production ought to be so balanced in the nation at large and in specific industries that maximum social efficiency is obtained. Too much of one factor implies too little of the others. When labor, for example, is relatively too plentiful, the right proportion can be obtained either by decreasing the supply of labor or by increasing the supply of the other less abundant factors. The reward of each factor depends primarily upon its marginal productivity, which in turn is determined by its relative supply. The major factors of production should be so balanced in the interest of welfare that labor's share would be as great as possible consistent with inducing the other factors to function properly. Likewise, within each factor—whether land, capital, enterprise, or labor—the various types should be properly balanced. Too much park land and too little agricultural land, too many shoe factories and too few farm-implement factories, too much specialized enterprise in the oil business and too little in the textile business, or too many lawyers and too few physicians—all and each would mean less efficiency than if a proper balance were maintained.

The distribution of the national dividend is especially significant to the labor factor for the reason that the workers are primarily the ends of the industrial process and only incidentally means in that process. The other factors should be rewarded to the point of inducing their coöperation. Labor's share should be maximum. What

[1]Continuation of "Education and Labor," *Journal of Educational Sociology*, IV, 7 (March, 1931), 434.

that share is depends somewhat upon the point of view taken and upon the definition given to income.

The prosperity and welfare of the laborer in modern industrial society is primarily dependent upon his money or nominal wages, which in turn depend upon the relative supply of labor and of the other factors of production. The supply of the other factors indicates the demand for labor. If the number of workers is small relative to the amount of available land, capital, and enterprise, wages will be high; otherwise they will be low. Welfare demands that wages be high, and, therefore, that the supply of land, capital, and enterprise be as great as possible.

Education can do but little to increase the total amount of actual land area in the world. Education has done much and can do more to increase the amount of land available for agricultural and other purposes. The draining of areas too wet for use, the "dry farming" and irrigation of semi-arid and arid regions, and the adaptation of crops to unclaimed lands, whatever their nature, are all examples of what education can do in reclaiming waste land. To the extent the schools assist in thus increasing the amount of usable land, they are playing a part in raising the wages of labor.

Concerning the supply of capital and its increase, education can do much more than in the case of land. The schools are doing much and could do more in cultivating habits of thrift and restraint. Increased savings made available for investors means a lower interest rate, the encouragement of enterprise, a consequent increase in the demand for labor, and, hence, higher wages. An essential element in thrift is habits of industry without which, of course, little would be available for saving. A pressing need in the schools and the home is more attention to the matter of cultivating habits of industry. Industry, in turn, is unarmed without efficiency. Education, therefore, by promoting technical efficiency, by cultivating habits of industry, of rational spending, and of saving, and by stimu-

lating invention can do much to increase the total supply of capital goods, which means higher pay for labor.

Of course, capital is of no avail if not used. Putting capital to use is called investment and is the function of the entrepreneur. Useless is capital without enterprise, and feeble is enterprise without capital. The two are correlatives, each stimulating the supply and functioning of the other. What education can do directly to increase enterprise may be indicated in a few words. First, much might be done to stimulate the birth rate on the higher intellectual levels. Secondly, youth with money and brains or merely with brains could be encouraged and trained for industrial service and leadership. America has been more fortunate than have the older countries in attracting men of high ability into business service. However, much yet remains to be done in showing that opportunity for real social service exists as fully in the industrial field as in the so-called higher professions, and in stimulating the attitude not only among potential and actual entrepreneurs but also among the population generally that business and industrial service is worthy of the highest ability, and in demonstrating that fair profits are incidentally necessary yet subordinate to that service.

The supply of labor can also be considerably influenced by education. In the interest of welfare in general and of high wages in particular, the supply of labor ought to be increased on the higher levels and decreased on the lower levels. The duties, opportunities, and social responsibility of parenthood taught to all levels will have the desired effects of stimulating the birth rate among those whose ability and income qualify them properly to take care of a family and of repressing the birth rate among others with less ability and income. Any training or instruction that has the effect of raising the standard of living will result in the postponement of marriage and fewer children. Education ought, therefore, to be especially concerned with rationalizing the standard of living among those whose

standard is already sufficiently high quantitatively, and with stimulating a higher standard among the poorer classes.

Of course, immigration from foreign countries as well as "from Heaven" will affect the supply of labor. Our present immigration laws afford much needed protection; but perhaps they ought to be extended to afford still fuller protection against flooding the ranks of ordinary and skilled labor. If we could stimulate the immigration of men with high ability for industrial leadership, it would have an opposite effect upon our labor problem; namely, that of elevating rather than of depressing wages. The extent to which the schools can, through training for intelligent citizenship, determine the course of subsequent industrial legislation will indirectly assist in elevating the wages and promoting the welfare of the workers.

Nominal wages must be converted into consumers' goods before "real" income is realized. Obviously the correlation between the former and the latter is positive and high but far from being perfect. Many persons show little wisdom in their buying. The school could do much to effect a more equitable distribution of goods by offering courses in the art and science of buying. Knowing how to buy implies a knowledge primarily of wares, markets, and prices. No course in the high-school or college curriculum would be more instructive or practically helpful than such a course. Not altogether how much a man earns but how well he spends is the determiner of his welfare.

The preceding sentence, however, does not cover the ground fully. Wise buying does not ensure the fullest possible income. It is one thing to possess goods and another thing properly to utilize them. To double the ability of persons to utilize goods would be to double the amount of goods in terms of utility. What education can do in this respect is beyond description or comprehension. All that is done to increase this ability, education, incidental or directed, must do. There is no other agency. The schools

can perform no greater economically productive service than, through a wisely planned liberal-education program, to increase the utility of wealth and services by increasing the ability to utilize them. Utility is a relation and depends as much upon the user as upon what is used. Utility can be increased by working upon either or both. Industry works primarily upon goods; education works primarily upon users; neither industry nor education should, however, neglect the primary function of the other. An education resulting in mere technical efficiency in producing goods thought of as yards and pounds with little ability to find enjoyment or benefit in their use not only starves the souls of the workers by giving a one-course intellectual diet, but greatly limits the product of their subsequent labor measured in terms of utility. Such an education misses its primary function. The ultimate end of education is persons, all of whom should be workers. Uppermost in the minds of school administrators and teachers ought to be the producers and consumers. Organic income, both subjective and objective, may be derived from production as well as from consumption activities, in work as well as in leisure. To promote enjoyment and benefit in both labor activities and utilizing activities ought to be the primary economic aim in education.

Broadly speaking, education is the nation's major industry. It is our largest and most important public enterprise. Something over thirty million persons—counting officials, teachers, and students—are engaged directly in the work of transmitting and re-creating formally our national life. Many others, including the makers of school buildings, equipment, apparatus, textbooks, and the like, are indirectly giving all or most of their time to educational work. The public has nearly seven billion dollars invested in the enterprise of education.[1]

Is this vast amount of labor economically productive? All will agree that the manufacturers of equipment and the

[1] *See* Edgar W. Knight, *Education in the United States* (Boston: Ginn and Company, 1929), page 2, for the figures quoted.

builders of school plants are directly productive and that the labor of teachers, other officers, and students is indirectly productive. It is easily pointed out that education increases economic efficiency and, hence, indirectly the sum of produced goods. A somewhat more subtle question must be answered: Is the labor of teachers and of students directly productive?

Economic goods are of two kinds: material goods and services. The latter, while less tangible, are no less economic goods than the former. Teachers render services for which they are paid. Their service is wanted, is bought and sold, and is a commodity in the labor market. Their labor is productive of subjective utility because it is wanted. It is also productive in an objective sense to the extent that it results in benefit to themselves, the pupils, and the nation.

The work of the pupils is also directly productive: first, of subjective utility because parents, teachers, and society desire it; secondly, of objective utility because it produces beneficial results in themselves and society. To the extent that the work of the school is projected upon tangible undertakings in garden, laboratory, or shop, resulting in the creation of useful concrete goods, it is doubtly productive. Utility in tangible goods is added to utility in personality. Moreover, it is probable that learning is greatest when associated purposefully with tangible productivity. Creating things to be used restrains and guides the intellect and hand. Of course, learning is the primary objective of school activities and not merely incidental to the process.

The discussion would not be complete without a few words concerning the very sensitive question of wages in the school system. However, merely indicating the general law of wages and a rough application to the school situation will be all that is attempted. The function of wages is to induce workers to render service. If a particular kind of labor is relatively very scarce, resulting high wages will have the effect of attracting more workers into that

kind of work and to retain those already engaged. When the supply of a certain service is great, low wages will discourage others from entering the occupation and encourage some to seek employment in another calling or industry. In short, low wages repel the overflow and high wages attract it.

In a general way the law of wages applies to the teaching profession, but with some very important modifications. First, custom prescribes with particular force what teachers are to be paid. Second, public policy tends to hold wages to a given minimum in spite of an oversupply of teachers. Third, the supply of teachers is largely determined arbitrarily by legislation prescribing the requirements for teacher's credentials. This limiting factor is subject to rather frequent change. Fourth, the demand for teachers in any school district is determined partly by the nature of the school program, partly by the taxpaying power of the community, and only partly by the marginal productivity or specific efficiency of the teachers.

These several qualifications prevent wide variations in the pay of teachers on any level in a particular school district on the basis of subjects taught. English teachers, with little if any regard to the general relative supply of English teachers, will receive approximately the same salaries as the teachers of other subjects. The wage or salary schedule may be high or low but will be approximately the same for all subject types.

In regard to the very tender question of men and women teachers, the law of wages applies with more precision. Women have flocked into the teaching profession and men have had a tendency to seek employment for their talents elsewhere. These tendencies are due to the facts that in general the law of supply and demand in the labor market results in higher pay for men than for women, and that public policy has seen fit to disregard this tendency, at least in part, in fixing educational salary schedules. On the elementary-school level, the results of this policy have perhaps

been more beneficial than otherwise. Women teachers have been attracted to positions where they are peculiarly efficient. However, on the high-school level we notice a widespread pernicious lack of balance between men and women teachers. The proper proportion can be restored only by inducing with higher pay the undersupplied element to render service. If women teachers are relatively few in number in a given high school, their marginal productivity will be high and justice as well as sound policy dictates that they receive somewhat higher salaries than men in order that more such teachers will be attracted to the school and a proper balance of the sexes be restored, provided, of course, that the higher pay is necessary to effect the purpose. Sentimental slogans such as "equal pay for equal work" simply are not applicable unless the product is accurately measured, and accurate measurement of the intangible contribution of teachers is impossible. It is less difficult to determine what teacher types are most desired and to reward them sufficiently to obtain their services.

This principle applies broadly as well as specifically. If better teachers on the whole are to be induced to enter the field of education as a profession, it will be because they are attracted by higher rewards than are now offered. These rewards, of course, ought not to be wholly financial. In fact, it is perhaps possible that very high salaries without adequate professional safeguards might make the profession a prey for the salesman and the politician. Evidence is not completely lacking that these classes have already become in some localities somewhat firmly entrenched in at least a few highly rewarded administrative positions. Professor J. K. Hart[2] thinks this "a step in the right direction"; that is, towards educational statesmanship. My acquaintance with politicians and their methods makes me doubt the soundness of this optimism. Educational workers should receive pay sufficient to induce the best teacher-type

[2]Joseph K. Hart, *A Social Interpretation of Education* (New York: Henry Holt and Company, 1929), pp. 305-306.

of men and women to function with dignity, security, and self-respect. To attract some other type would certainly not be wise. It ought to be emphasized that strong personalities are as necessary in the classroom as behind an office desk. Artistry in education is as important as administration and should not be discriminated against on the salary schedule. The two types of work demand somewhat different types of persons to do the work. Each type should be paid sufficiently well to induce the best personalities of each to function.

A MEASUREMENT OF THE EFFECTIVENESS OF COLLEGE TEACHING

A. O. Bowden

THE PROBLEM

What is meant by teaching? Many have held that the effectiveness of a teacher's work is measured by the amount of change brought about in the one taught. This change, of course, is internal, consisting of changed attitudes, changed beliefs. Those changes bring about a modification of the individual's activities.

This thinking, these attitudes, these beliefs are not formed in a vacuum. If accurate data is not at hand the mind creates them and proceeds to furnish material to formulate these beliefs. One's mind is never a vacuum. One's ignorance of a field of knowledge or of a subject does not prevent one from thinking nor does the mind remain empty. Rather it is filled up with preconceived notions, prejudices, and biases. Usually the more ignorant one is the more certain that he knows what he is talking about. One's mental universe must be consistent to himself. This is the basis of mythmaking and the growth of legend. Myths are more illusory than legends and based often on imagining and daydreaming, while legends are based upon facts half or partially remembered. In legends the gaps or half remembered facts in one's mind are filled in and the continuous process of thinking goes on. It should be the purpose of all content courses, therefore, to see that sufficient facts are furnished the mind to enable it to reach correct pictures of situations and events or, rather, prevent it from filling in imaginary data which mislead reasoning. It is one of the problems of the school to fill in and orient students in the various fields.

Instruction is not a pouring in process, a filling up of the mind merely, but rather a process of substituting scientific data for preconceived and half-formed notions.

THE METHOD

In order to determine the amount of change wrought in older, mature college students, the writer set up the following techniques as an attempt to measure the amount of change that could be effected in the thinking and attitudes of a class of students in an advanced course in anthropology during the spring quarter of 1930 in New Mexico State Teachers College and in the summer quarter in San Diego State Teachers College in a course in social psychology. The classes in both institutions were composed of both men and women who had had several years teaching experience.

The list of statements and questions given below was mimeographed and a copy was given to each student to fill out at the first meeting of the class before anything was said about the outline or subject matter of the course. Nothing was said as to the purpose of the questions. No comments were made.

During the course no special attempt was made to bring the questions and statements up for discussion nor to place them boldly in relief except to marshal all the facts available relating to the ideas involved in the statements. The material covered in the course in anthropology is roughly represented in Kroeber's *Anthropology* and in consistent and well-selected readings which were assigned. The course was conducted by a combination of methods consisting of lectures, class discussions, quizzes, and papers required from time to time of the students.

The course at San Diego in social psychology covered the materials represented in Kimball Young's *Social Psychology* and an abundance of well-selected collateral readings. The method of instruction in both institutions was as nearly alike as one individual teacher could make it, save only a slight variation in materials.

On first thought, one may wonder why the same questions and statements were presented to the two classes. It will be remembered that social psychology has its foundation in the field of anthropology and much of the prejudice

and bias represented by the test materials is touched in the two subjects differing only in points of attack and points of view. For example, in anthropology the topics of race, language, culture and its distribution, heredity, and the like were treated. Religions, sentiments, emotional thinking, biases, and wishful thinking were discussed. In the course in social psychology the biological basis of human behavior, the psychology of language, personality, culture, prejudices, myths, legends, the psychology of crowds, mobs, audiences, public opinion, and propaganda were examined. For the correction of certain biases, such as race differences, the material in the field of anthropology is better suited than that found in the field of social psychology.

What is your present mental or emotional attitude towards the following questions? We are not concerned whether you can answer correctly each or any question now. We desire to know the present state of mind you have towards each. Answer without reflection. Give the first impression that comes into your mind.

1. Which do you consider the most superior race, taking into account the factors of intelligence, character, and morals?
2. Is there a correct universal standard of beauty?
3. Which is the most moral of the races? Name them in order.
4. Do you believe man descended from the monkey?
5. Is civilization a quality of mind or a condition of the quantity of ideals, beliefs, and material usable objects?
6. Does man inherit biologically his own language propensities; *i.e.*, such as an inherited tendency to speak English, German, and the like?
7. From the standpoint of universal culture which is better for mankind today, a high or a low tariff between nations?
8. Was there ever a time when human groups were in a state of nature and free from social restraint?
9. Does the individual child go through the same developmental stages which the race has followed?
10. Do you believe that no one is cultured unless he can read, write, and know literature and the classics?

This same list of questions was given at the last meeting of the class without comment, explanation, or discussion.

The data of the two sets, those given at the beginning of the course and those at the last, were tabulated.

DATA AND RESULTS

TABLE I

New Mexico State Teachers College

Case Number	*Statements completely changed*	*Statements partially changed*	*Per cent of change in the 10 statements*
1. E. W. B.....	5	1	60
2. H. C.	2	0	20
3. E. H.	7	1	80
4. C. E. H.....	2	2	40
5. A. W. H.....	3	2	50
6. E. K.	2	1	30
7. C. H. L.....	5	0	50
8. M. Mc.	1	4	50
9. I. R. M.....	1	2	30
10. L. W. M.....	2	2	40
11. J. M.	4	0	40
12. N. P.	5	0	50
13. E. M.	5	1	60
14. C. L. R.....	5	0	50
15. H. M. S.....	3	0	30
Average....	3.5	1.07	45.3

The above table does not give the specific questions on which there was change. It only points out that amount of change each of the fifteen individuals made during the course. The cases below show the specific question and how the individual answered them before and after the course in anthropology. In weighting the value of partial change it was thought best to give it an arbitrary value of one half.

Case Number 1

Before Question Number	*After* Question Number
1. No difference	1. Each race thinks it is best
2. No	2. No
3. Caucasian	3. Depends upon mores
4. Yes	4. No
5. Yes	5. Yes
6. No	6. No
7. High tariff	7. Neither
8. Yes	8. No
9. No	9. No
10. One may be cultured on other lines	10. False

Case No. 1—(*Continued*)

Complete change	5 questions and statements
Partial change	1
Per cent change	60

Case Number 2

Before	*After*
Question Number	Question Number
1. White	1. We don't know
2. No	2. No
3. White	3. Probably the English
4. No, not exactly	4. No, but it is unknown
5. Yes	5. Yes
6. No	6. No
7. High	7. High
8. No	8. No
9. Yes	9. Yes
10. True	10. False

Complete change	2 questions and statements
Partial change	0
Per cent change	20

Case Number 3

Before	*After*
Question Number	Question Number
1. Yellow, White, Brown, Black	1.
2. No	2. No
3.	3. The Chinese may be as far as living up to their morals is concerned
4. No	4. No
5. Both	5. Beliefs and material culture
6. No	6. No
7. Low tariff	7.
8. I don't think so	8. Yes
9. Not identically	9. Many as an individual
10.	10. False

Complete change	7 questions and statements
Partial change	1
Per cent change	80

TABLE II

San Diego State Teachers College

Case Number	*Statements completely changed*	*Statements partially changed*	*Per cent of change in the 10 statements*
1. A. A.	7	1	75
2. B. C.	4	3	55
3. B. F.	4	3	55
4. B. H.	5	1	55
5. B. W.	3	0	30
6. G. K.	6	0	60
7. C. E.	5	2	60
8. D. A.	5	1	55
9. F. N.	3	1	35
10. F. E.	2	1	25
11. G. E.	2	2	30
12. G. S.	3	1	35
13. K. B.	7	0	70
14. M. B.	5	1	55
15. M. M.	3	1	35
16. N. N.	6	0	60
17. R. M.	4	1	45
18. R. O.	7	0	70
19. R. H.	2	0	20
20. S. A.	7	0	70
21. S. R.	1	2	20
22. T. E.	4	1	45
23. T. M.	6	1	65
24. W. L.	3	2	40
25. W. A.	3	1	35
Average....	4.04	1.04	45.2

Case Number 1

Before Question Number	*After* Question Number
1. Caucasian, Mongolian	1.
2. No	2. No
3. White	3.
4. Yes	4. No
5. Quality of ideals, etc.	5. Quality of ideals, etc.
6. No	6. No
7. High	7.
8. Yes	8. No
9. Yes	9. No
10. True	10. False

Case No. 1—(*Continued*)

Total change	7
Partial change	1
Per cent change	65

Case Number 5

Before Question Number	*After* Question Number
1. White, Yellow, Black	1. White, Yellow, Black
2. No	2. No
3.	3. White
4. No	4. No
5. Quantity of ideals	5. Quantity of ideals
6. No	6. No
7. Low	7. Low
8. No	8. No
9. No	9. Yes
10. Wrong	10. False

Total change	3
Partial change	0
Per cent change	25

TABLE III

Question Number	*Number of students making complete change*	*Number of students making partial change*
1	26	5
2	4	4
3	19	12
4	5	2
5	21	1
6	5	1
7	7	10
8	16	3
9	15	1
10	17	2

Data in this table are obtained by adding all the changes and partial changes in the two classes combined. It shows that the greatest change in attitude was in regard to superiority of races, the meaning of civilization, the nature of man in a primitive state, the recapitulation theory, and the definition of culture.

Although the data given to the two classes were different approaches to the prejudices and biases represented by the ten questions, the total amount of change in the New Mexico group and the California group was strikingly similar.

The writer does not claim that all the prejudices and biases represented by the ten questions are highly important in general, but he feels that these are common and, from a scientific standpoint, without much foundation in fact. The most he claims for this investigation is that it points to a method of measuring the amount of biases and prejudices that may be harmful. It is possible that in any field of knowledge now taught in our colleges and high schools many erroneous beliefs are held by almost all students. These may be listed, arranged, and presented to any class in most content subjects. It may be that the elimination of such prejudices is one of the most important functions of a teacher. A method similar to this one described in this paper could be worked out and any teacher could in this way have a rough index worked out as to the effectiveness of the methods he uses in his class and the wisdom with which he selects his material of instruction.

Such subjects as physiology, hygiene, geography, history, civics, citizenship, and economics contain material which may be used to eradicate many biases and prejudices almost universally held by students. It is the duty of schools to eliminate as many of the bad kinds of prejudices as possible. Singularly enough nearly all school subjects are avenues through which these may be reached and changed without resorting to preachments and dogmatisms.

All the individuals in these two classes are advanced students, nearly ready to receive degrees. While no I. Q. ratings were available for all of them, they are rather superior in intelligence as measured by their grades in other courses. All except two have been teachers and are preparing for teaching as a life work. It seems rather bad that narrowing prejudices should exist in the minds of those who have charge of instructing the young.

THE SCHOOL-TEACHER STEREOTYPE

KENNETH H. MCGILL

Stuart A. Rice and Willard Waller recently published an article on stereotypes in the *Papers and Proceedings of the American Sociological Society*.[1] Their article demonstrates: (1) that stereotypes exist, (2) that they have a relation to occupational classifications, (3) that their action may be measured statistically, and (4) that their action is bound up with our estimates of personal traits such as intelligence and craftiness. It also raises the question: Of whom do we have stereotypes? This question, together with the fact that stereotypes are related to occupational classifications, suggests the present study. In other words, this paper is concerned with "occupational" stereotypes.

Before proceeding further, it might be well to explain what we mean by stereotypes—and by occupational stereotypes. Stereotypes, according to Lippmann,[2] are those pictures of things which we carry about in our heads. They represent the appearance of the individuals of certain classes of objects and persons. Man cannot become acquainted with all of the world about him. He must as he experiences the objects and persons of his surroundings classify them, and then set up a type in his mind to represent each of these classes. When he later comes in contact with a member of a class, his picture of the class presents itself within his head and conditions his behavior towards this particular member of the class. These "class types" or "class pictures" are known as stereotypes. Kimball Young's latest work[3] shows something of the rôle that stereotypes, in general, play in everyday life. The present article, however, deals only with stereotypes of people, and it is interested in these only in so far as they are bound

[1]Stuart A. Rice and Willard Waller "Stereotypes," *Papers and Proceedings of the American Sociological Society*, XXII (1928), pp. 180-185.
[2]Walter Lippman, *Public Opinion* (New York: Harcourt, Brace and Company, 1922).
[3]Kimball Young, *Social Psychology* (New York: F. S. Crofts and Company, 1930).

up with occupations. For instance, let us say that we possess a stereotype of the traffic officer as an occupational group—or of the stock broker or the news reporter. When we see an individual—or his photograph—who suggests the cop, the broker, or the reporter to us, our picture of this occupational class is brought to mind. We then proceed to classify the individual as to occupation and to regard him accordingly. It is with such stereotypes that this paper is concerned.

It is impossible, however, to study all of the class types which represent to us the persons of the various occupations; so one—the stereotype of the female school teacher—is chosen. The teacher is selected because teachers are almost universally known as an occupational class and because a study of teachers may contribute to educational sociology; and the woman school teacher is used because women teachers far outnumber men in American elementary and secondary schools. The present article not only shows the existence of the school-teacher stereotype, but it presents some of the markings or expressions of the face of the teacher, which we recognize as a part of our own school-teacher stereotype. It also shows stereotypes acting as a basis for occupational identification.

In this instance, we study the stereotype as it is called to mind by photographs. Ten photographs, 5 of women and 5 of men, were mounted without identification on a cardboard and numbered from 1 to 10. These pictures were posed photographs and were approximately 4 by 6 inches in size. The pictures, according to their mounted arrangement, were: (1) a society woman, (2) a farmer, (3) a woman school teacher, (4) a plumber, (5) a woman school teacher, (6) a printer, (7) a housewife, (8) a business man, (9) a woman school teacher, and (10) a farmer. The teachers were over twenty-five years of age and all of them had been teaching more than six years at the time the photographs were taken.

The prepared chart was taken before small groups of students at the University of Nebraska. The members of these groups were asked to identify the pictures by number; that is, to state the occupational class to which the facial appearance of each person suggested him as belonging. If an individual on the chart was known to a student, no identification was to be given. If a student had difficulty

TABLE I

	Picture					
Occupational Class	No. 1 *Society woman*	No. 3 *Teacher*	No. 5 *Teacher*	No. 7 *Housewife*	No. 9 *Teacher*	*Total frequency per class*
Teacher	14	32	86	23	69	224
Housewife	15	3	4	36	20	78
Office worker	11	33	11	16	5	76
Musician	36	3	....	13	3	55
Nurse	1	3	15	7	13	39
Sales woman	6	16	2	3	3	30
Actress	12	1	....	13	1	27
Singer	18	....	....	2	....	20
Student	7	3	1	6	....	17
Painter	4	7	....	2	2	15
Business woman	....	6	1	....	7	14
Domestic	2	10	1	....	....	13
Social worker	....	4	....	2	5	11
Writer	1	4	2	2	....	9
Missionary	....	....	6	1	1	8
Mother	....	2	1	....	4	7
Society woman	2	1	....	3	....	6
Country woman	....	1	2	....	2	5
Beauty-parlor worker	....	1	....	2	....	3
Church worker	....	....	2	....	....	2
Lawyer	....	....	2	....	....	2
Librarian	....	....	2	....	....	2
Delinquent	1	....	....	....	....	1
Telephone operator	....	....	....	....	1	1
Waitress	....	....	....	....	1	1
Total frequency per picture	130	130	138	131	137	666

in making an identification, a similar action was to be taken. Students were allowed to look at the chart as long and as closely as they desired. No suggestions as to identification were given. The identifications made were from an unknown number of stereotypes that existed in the minds of the identifiers—it being assumed, of course, that the stereotype brought to the mind of the identifier by each photograph suggested the occupation he assigned to that photograph. One hundred forty-one students participated in the task.

The occupational classes—25 in number—to which the 5 women were assigned, are shown in Table I.[4] The table

[4]Occupations associated with the pictures of the men are not included in Table I. We are studying a female stereotype.

is read: 14 persons identified No. 1 (society woman) as a teacher; 32, No. 3 (teacher) as a teacher, etc., or No. 9 (teacher) was identified by 69 as a teacher, by 20 as a housewife, etc. Identifications expressed thus: "No. 7—teacher or nurse" are not recorded in this table. There were 13 such identifications. No. 1 was designated once as being either a musician or an artist and twice as being either a society woman or a nurse. There was some uncertainty, therefore, as to which stereotype the picture called up, though there was no confusion in this case with the school-teacher stereotype. Picture No. 3 received 7 of these doubtful identifications, 3 in which the teacher type was confused with other types: "nurse or teacher," "business woman or teacher," "stenographer or teacher"; picture No. 5 received 1 doubtful identification: "teacher or stenographer"; No. 7, 1: "housewife or teacher"; and No. 9, 1 "teacher or nurse." From this it appears that certain stereotypes have something in common, especially teacher and nurse and teacher and stenographer stereotypes.

In Table I occupational classes low in frequency and similar in nature are combined under one heading; for instance, opera singer, radio singer, stage singer, "talkie" singer, and vocalist are included under *singer,* and bookkeeper, office girl, private secretary, and stenographer under *office worker.* Such shuttling, as this, also occurs in the handling of the data of the school-teacher class. The art teacher, the college instructor, the kindergarten teacher, the teacher of mathematics, music, physical education, or science, and the supervisor are all included under *teacher.* The number of such classes combined with the strictly teacher class under each picture is as follows: 7 under No. 1, 2 under No. 3, 4 under No. 5, 7 under No. 7, and 3 under No. 9.

This combining of identifications not only causes a slight increase in the frequencies for certain occupations, but it also makes the wide range of occupations which results

from an uncontrolled identification appear narrow. The statistician, however, regards it as the common-sense way of preparing the table. On the other hand, the psychologist thinks of this shuttling of classes as destroying the *stereotype* which lies back of the classification. The statistician would say that the table, as given, calls a spade a spade; the psychologist, that the distribution of data is controlled, that the action of the stereotype has been ignored. However, that may be, the conclusions to be drawn are the same.

The data in Table I reaffirm some of the propositions set forth by Rice and Waller. This data may be treated from the standpoint of probability—greatest probability—as Rice and Waller treat the material in their study[5]; or it may be dealt with in a more refined way from the standpoint of least probability. Such treatment, however, is hardly necessary in view of our present purpose.

There is a school-teacher stereotype. Let us take picture No. 5 with 138 identifications out of a possible 141. It has a frequency of 86 at the school-teacher category. This is six times greater than any other frequency under picture No. 5. Photograph No. 9 has a frequency at the teacher class which is five times as great as any other of its frequencies. Other high frequencies are present in Table I. What causes this decided clustering of identifications at certain categories under each photograph? It is the action of the stereotype—which has already been described—and the frequency and the recency with which the identifier has come in contact with the representatives of the various occupations. This latter thing places existing stereotypes in their relation to the forefront of the consciousness or the attention of the identifier. Which stereotype, then, causes the greatest piling up of identifications? It is the school-teacher stereotype. The school-teacher stereotype is responsible for the fact that 224—

[5]For a complete discussion of this treatment, see Stuart A. Rice, "Stereotypes, A Source of Error in Judging Human Character," *Journal of Personnel Research*, V. 7 (1926), pp. 267-276.

more than one third—of the total number of identifications made were accorded the school-teacher occupational class.

Since pictures No. 5 (teacher) and No. 9 (teacher) have the highest frequencies in comparison with all other frequencies and especially in comparison with the frequencies of the school-teacher class row, we may assume that these two pictures approach the school-teacher stereotype in appearance. In other words, the writer of this paper was able, as he selected the pictures for his study, to recognize some of the facial markings of his own school-teacher stereotype in the pictures of school teachers.

The high relationship which the data in Table I shows as existing between the photographic appearance of the teacher and the school-teacher stereotype brings up the query: What is there about the school teacher's face that calls up the stereotype? The answering of this question is our second proposition. When the students who did the identifying had completed their task, they were asked to give a brief reason for each identification made—to state the specific thing in the face of the person which brought the stereotype to mind. The completed work came in much after this fashion: ". . . No. 3,—school teacher—strained look in eyes . . . No. 5,—teacher—stern mouth . . . No. 7,— . . ."

From the total number of facial appearances or expressions mentioned in connection with all ten pictures, those pertaining to school teachers were separated and tabulated.

TABLE II

Appearance or Expression		*Times mentioned*
General facial		90
Specific facial		63
mouth	31	
eyes	29	
chin	3	
Total		153

A summary of this tabulation is given in Table II. It will be noted that the general appearance or expression of

the face, as leading to the association of the picture with the school-teacher occupation, is mentioned 90 times; mouth expression or appearance, 31 times; etc., giving a total of 153. What of the other 71 of the 224 teacher identifications? What were the reasons for these identifications? In 17 instances just the word "face," "mouth," "eyes," "hair," or "dress" was given as calling the teacher class to mind.[6] Such indefinite reasons have been ignored in preparing Table II. When the students participating were asked to state reasons for identifications it was explained that if difficulty was experienced in giving a reason for an identification the reason could be omitted. No reasons, then, were given for the remaining 54 of the 224 school-teacher identifications.

Table III presents the various expressions or appearances in detail. It is read: a stern, dignified, reserved, general appearance is mentioned once in connection with picture No. 1 (society lady); twice, with No. 3 (teacher); etc.—20 times in all—as that which led to the association of the picture with the school-teacher class. The table is self-explanatory. It contains some of the markings or expressions of the facial features of the teacher which those who made the identifications in this study recognize as part of the school-teacher stereotype they have in their heads.

This study, then, suggests that the teaching profession leaves telltale impressions upon the faces of those who follow it. These impressions become a part of our stereotype of the school teacher, and when we see them in a face they call to mind our teacher stereotype and we class the person as a school teacher. We cannot say, however, from studies thus far made, just how much we may rely upon the teacher stereotype, or any other stereotype, as a basis of correct occupational identification. The fact that photographs No. 5 (teacher), 7 (housewife), and 9 (teacher) were identified most frequently as teacher, housewife, and teacher, respectively, seems to indicate that stereotypes

[6]Hair was mentioned twice; dress, twice.

may be depended upon, to a certain extent, in the correct identification of persons as to occupation.

Table 1, besides showing a probable relationship between teacher, stenographer, nurse, and housewife stereotypes, also reveals the fact that the picture of the teacher seldom brings to mind the stereotype of the musician, the actress, the singer, or the society woman. Neither does it call up the beauty parlor, the delinquent, or the waitress type to any great extent. From this, it appears that the teaching profession not only puts certain markings into the face but also takes some out of it and keeps still others from ever appearing there. Table III apparently contains some of those impressions which teaching makes upon the face. We cannot be certain from this study, however, that school teaching leaves a distinguishing occupational stamp upon the facial features of the teacher.

TABLE III

Times Mentioned Per Picture

What suggested Identification	*No. 1 Society woman*	*No. 3 Teacher*	*No. 5 Teacher*	*No. 7 House-wife*	*No. 9 Teacher*	*Total times mentioned*
General facial expression						
Stern, dignified, reserved	1	2	10	2	5	20
Determined, firm, set	1	2	4	1	7	15
Intelligent, capable	1	1	3	1	2	8
Serious, patient, hopeless	....	2	2	....	3	7
Thoughtful, sympathetic, composed	1	2	2	1	....	6
Prim, trim, neat	....	1	3	1	....	5
Studious, instructive	....	2	3	....	....	5
Tired, bored, disgusted	....	....	3	1	1	5
Leader-like, forceful, brooks-no-interference	....	....	1	....	3	4
Nervous, strained	1	1	....	1	....	3
Old-maidish	....	....	2	....	1	3
Impersonal, hard	....	1	1	....	....	2
Refined	1	....	....	1	....	2
Ascetic	....	....	1	....	....	1
Minister-like	....	....	....	....	1	1
No-one-is-right-but-me	....	....	1	....	....	1
Turn-rise-pass	....	....	1	....	....	1
Vinegar-drinker	....	....	1	....	....	1
Specific facial expression						
Mouth						
Determined, firm, set	....	4	6	2	6	18
Stern, stony	....	2	2	....	2	6
Strained	....	1	2	....	1	4
Kindly, pleasant, understanding	....	1	....	....	1	2
Straight-lipped	....	....	....	....	1	1
Eyes						
Determined, firm, set	....	2	3	1	4	10
Piercing, staring	....	1	2	....	3	6
Straightforward	....	1	1	....	2	4
Dreamy, impractical	1	1	1	....	....	3
Kindly, understanding	....	1	1	....	1	3
Strained	....	....	1	1	....	2
O-I-know-all-the-tricks look	....	1	....	....	....	1

From Table III we can construct the face of the school-teacher stereotype. The result is not a pleasing picture. It is a harsh, painful, and forbidding one. Perhaps this constructed picture of the stereotype bears a close resemblance to the face of the school teacher. If it does, the occupational markings of the teaching profession show up plainly after fifteen years of teaching. They are quite evident after ten years of service, and even discernible after five. What can be done to change a system of education so that it will not leave such a heavy impress upon those involved in its administration? Perhaps that is a question which educational sociology can answer.

RESEARCH PROJECTS AND METHODS IN EDUCATIONAL SOCIOLOGY

EDITOR'S NOTE: *The May issue of the* JOURNAL *was devoted to research. It was planned to include in that issue a statement of the history and work of the Social Science Research Council which is the outstanding national organization promoting social research in America. On account of lack of space the article had to be omitted, but it is presented herewith.* THE JOURNAL *is indebted for it to Robert S. Lynd, secretary of the Council, and M. F. Hall, secretary to Mr. Lynd.*

The present officers of the Council are:

Edwin B. Wilson, Harvard University, President
Robert S. Lynd, Permanent Secretary
Meredith G. Givens, Special Research Secretary
Walter R. Sharp, Fellowship Secretary
Carolyne Allan, Controller

The present address of the Council is 230 Park Avenue, New York City.

THE SOCIAL SCIENCE RESEARCH COUNCIL

The American Political Science Association appointed in 1921 a Committee on Political Research to study the scope and method of research in the field of government. The findings of this committee, based on a study of the situation in several of the social sciences, pointed to the following conditions: Appreciable progress had been made in recent years in the development of a more scientific and inductive methodology in certain of the social sciences which might be of great value to other related social sciences; there was excessive overspecialization, too complete departmentalization and isolation of the special social sciences; there was no effective medium to ensure coöperative and coördinated research; and the research efforts of some of the most competent men in political science were frequently crippled and thwarted because of lack of equipment, lack of leisure, and heavy teaching loads in our colleges and universities.

On the basis of these findings the Social Science Research Council was organized in 1923 by members of the Political Science Association, the Economic Association, and the

Sociological Society, with Professor Charles E. Merriam as chairman. The American Statistical Association was added later as a fourth member. In 1924 the organization was incorporated. Subsequently, the American Psychological Association, the American Anthropological Association, and the American Historical Association were included in the roster of constituent societies, each of these being represented on the council by three members.

The societies which at present constitute the council do not, of course, regard themselves as covering the whole field of social science. Wherever problems of human behavior are dealt with by scientific methods, social science is being applied, tested, or developed. In all efforts of this type, whether they are made in a university, a clinic, a court room, a government bureau, or a business enterprise, the Social Science Research Council feels an interest which it hopes to see reciprocated. In 1929, four members-at-large were appointed to the council, enlarging its constituency by adding members from additional groups. In 1930 the number was increased to six. At present these memberships-at-large are held by representatives of the psychiatric, legal, public-health, educational, and geographical fields.

The seven constituent organizations and these members-at-large are brought together in the Council organization for the purpose of promoting scientific research on any valid problem of social inquiry, particularly in cases where problems overlap the boundaries of one or more of the special fields concerned. The Council is interested in encouraging greater diversity and fertility of scientific attack, including more carefully controlled experimentation, upon any clearly defined problem of human behavior. It believes that such fertility of attack is encouraged when specialists from more than one discipline—the economist, the historian, and the anthropologist, or the political scientist, the statistician, the sociologist, and the psychologist—are enabled to formulate a common problem and join in planning and executing a common program of research.

This stress upon a type of research involving questions that cut across the lines of the single disciplines has represented a desire to assist at a point in the research field where the difficulties confronting the individual investigator are obviously great, for the cross-discipline problem frequently calls for a liberality of financing and a degree of planning and patience in the gathering of data of unusual sorts beyond the reach of the lone investigator. At the same time, however, the Council has never intended any such preoccupation as it may have shown with these cross-discipline problems to involve neglect for the concerns of the great body of individual investigators working within the range of their respective disciplines. Concern with "coöperative research" or "interdiscipline problems" should not be allowed to hamper the first-rate mind, alert to the possibilities inherent in whatever problem enlists its energies. In line with this general point of view, the following action has been adopted: "The Social Science Research Council is concerned with the promotion of research over the entire field of the social sciences. The Council's thinking thus far has been largely in terms of social problems which cannot be adequately analyzed through the contribution of any single discipline. It is probable that the Council's interest will continue to run strongly in the direction of these interdiscipline inquiries. At the same time, the Council is quite aware of the fundamental place which the several recognized disciplines occupy in the upbuilding of more effective scientific research in the social field. The Council consequently acknowledges its definite responsibility for the promotion of research in the several constituent disciplines. In giving continued consideration to the needs of research in the individual disciplines, the Council would welcome the assistance of the constituent societies." Growing out of this action, plans are under way further to implement this plan through specific coöperation with the several constituent societies.

It is, further, the purpose of the Council to bring to-

gether scattered or isolated workers upon similar social problems in order to minimize needless duplication of effort. It is the policy of the Council not to undertake directly investigations other than the preliminary studies or to deal with problems other than those involving two or more disciplines.

The Council's internal procedures have developed experimentally. It was not until the fall of 1927 that the expanding work and the acquisition of substantial funds compelled the engaging of the first members of a full-time staff and the opening of administrative headquarters offices, which are now located at 230 Park Avenue, New York City. The bulk of the Council's work is carried on by committees assisted and coördinated by staff members. The chief of these committees is the Committee on Problems and Policy, organized in 1925, with a rotating membership on a three-year tenure not necessarily confined to persons who are Council members.

Advisory committees are set up, either under the Committee on Problems and Policy or directly under the Council, to aid in the consideration of the many proposals for research and other suggested Council work. Their membership consists of specialists representing varying points of view touching the cluster of problems that constitute the field of the committee in question, with a liberal sprinkling of men working in other fields whose special knowledge promises to fertilize the committee's deliberations. The latter type of personnel is included because of the Council's special interest in encouraging work involving more than one of the conventional disciplines. Advisory committees are not permanent, both the list of committees and the membership in each being reconsidered from year to year. At the present time, the Council is experimenting with a divisional set-up with staff members appointed to develop programs of research in several fields.

On the financial side it may be of interest to note that, since the first appropriation in 1924, the Council has ex-

pended on appropriations completed up to June 30, 1930, a total of over $600,000, with active appropriations for other than general administration amounting to $1,700,000. For the Council's general administrative expenses over the fourteen-year period beginning with 1925, the Council is assured a total of nearly $700,000.

The Council is conducting three rapidly expanding fellowship programs. The primary objective of the Research Fellowships in the Social Sciences has been to broaden the training of promising young social scientists by giving them, during the years immediately following the completion of their formal graduate work, the opportunity to carry on, unburdened by teaching or other duties, objective programs of research extending, preferably, beyond the frontiers of their immediate disciplines. In general, the Council feels that it is a sound principle to allow to individual fellows substantial freedom as regards the development of their programs of study. As an experiment during the year 1930-1931, however, the Research Fellowship Committee is contemplating the appointment of a limited number of fellows in coöperation with certain of the research advisory planning committees of the Council in such fields as crime, the family, public administration, and international relations; in each of these cases the advisory committee would assume responsibility for laying out for the fellow in question a course of "clinical" experience along nonacademic lines not ordinarily open to the academically trained student.

The program of Fellowships in Agricultural Economics and Rural Sociology was planned to increase the number of adequately trained investigators available to use the substantial funds for research in these specialized fields available from federal and other sources. There are gratifying indications that these fellowships have already affected substantially the quantity and quality of researchers in these two important fields.

The first annual award of fellowships to Southern graduate students in the social sciences was made in March 1930. The major purpose of these new fellowships is to develop a superior quality of personnel scientifically trained to work on important social problems confronting the southern section of the country. The fellows will spend the next academic year at accredited graduate schools studying social-science problems of special interest to the South.

The Council also awards grants-in-aid to a limited number of mature scholars whose capacity to carry on productive research has been clearly established. While in setting up these grants the Council has primarily in mind the competent individual investigator working on a good problem in any one of the social disciplines, it also welcomes applications for aid on projects involving two or more of the social sciences or promising to yield a significant methodological contribution. In any event, a substantial amount of work must already have been done on the project prior to an application to the Council.

The Council does not recognize the validity of the popular dichotomy between research and teaching. There is no denying that, under the guise of devotion to research, serious abuses of the teacher's responsibilities have in some cases occurred; and it is, of course, no service to research to blunt the interest of the oncoming generation of social-science investigators by dull and perfunctory hours in the classroom. The Council maintains, however, that even on the college level this conflict between teaching and research is more apparent than real; that, in fact, the best teaching tends to come from minds engaged in stimulating first-hand contact with significant research problems. The Council accordingly passed a resolution expressing its concern with the policies under which American collegiate education is being conducted: "Improvement of college teaching in the social sciences bears directly upon the Council's interests on at least two points. In the first place, more general understanding among college graduates of the complexities

of social life will promote the development of the sympathetic and enlightened public opinion which constitutes an important conditioning factor in many lines of social research. In the second place, better undergradute instruction in the social sciences will contribute in important ways to the development of the larger body of competent research personnel upon which effective future prosecution of social inquiry so largely depends. It is because the Council is so vitally interested in the quality of undergraduate instruction in the social sciences that it cannot be indifferent to the wise and deliberate cultivation of research activities among the members of the collegiate teaching faculties. From some points of view, teaching and research are conflicting objectives; certainly either may become so engrossing an interest as to result in the manifest neglect of the other. But from a different point of view, teaching and research are inseparably joined. Teaching is unlikely to remain vital and sound over the years unless the teacher not only keeps abreast of his subject but maintains a modest program of research or creative work. Such a program need not issue in imposing monographs nor in works of outstanding authority; but tangible evidence of intellectual growth is indispensable. Research opportunities exist close at hand in every community. Encouragement of research within appropriate limits is an essential condition for the maintenance of collegiate teaching efficiency."

BOOK REVIEWS

Pioneering on Social Frontiers, by GRAHAM TAYLOR. Chicago: The University of Chicago Press, 1930, 457 pages.

This autobiography of the founder and head resident of Chicago Commons is a document of unusual interest. In it, Graham Taylor gives a vivid and absorbing account of the origin and development of those early social, civic, and educational movements which have played so dramatic a part in the growth of the finer aspects of the past thirty-five years of Chicago's life, and of the personalities of the pioneer social leaders whose vision and community mindedness initiated and fostered these movements. While the story for the most part is told against a Chicago background, it contains also an account of national and international experiences and intimate pictures of the pioneer social and political leaders in America, England, and the Orient, whom Graham Taylor has encountered in his travels. It is valuable above all for the very human account it gives of the way in which a man's personal experiences develop his social consciousness and his philosophy of life.

LUCY J. CHAMBERLAIN

Man Versus Microbes, by NICHOLAS KOPELOFF. New York: Alfred A. Knopf, 1930, 305 pages.

Doctor Kopeloff's book is one of the finest of its type which has come to the reviewer's notice. It is brief but inclusive, written in a clear easy flowing style, and has the weight of authority which is founded upon well-trained scientific knowledge. The book treats the subject of bacteriology as a whole and as this science is related to man and his life, both biological and economic. It is the type of book which one reads for pleasure as well as reliable information. It is a text which lends itself very well to teaching, especially for the biologist who wishes to present the subject of bacteriology interestingly so that his lay students can get an appreciation of what "germs" are in the scheme of things.

Microbes are considered generally and specifically. Their relation to disease in plants, animals, and man are dealt with interestingly. Their place in industry and economics are handled with skill. The ultramicroscopic world and its denizens is touched upon with stimulating effect.

This reviewer feels that here is a book which can be recommended by the physician to patients who have intelligence and an inquiring mind. It is one which can be read by any one who wishes to know something about bacteriology without becoming a bacteriologist. Technical language has been deleted but authenticity has not been sacrificed. This is an excellent book.

SHAILER U. LAWTON

The Teaching of Home Economics, by CLARA M. BROWN and ALICE H. HALEY. Boston: Houghton Mifflin Company, 1928, 395 pages.

This book may well serve its purpose as a guide to present-day thinking in terms of the organization and presentation of home-economics subjects in various types of schools and classes. It is of special value to the teacher in training although the supervisor and experienced teacher will find much suggestive material of value to their work. The organization of the book is especially commendable. It is clear and concise dealing directly with principles of subject-matter organization, classroom procedure, measuring results and integration with other courses, as well as giving helpful suggestions on the choice of equipment and illustrative material.

Stimulating questions and representative references close each chapter. One is led to do independent thinking in solving one's problems.

The several methods used in the presentation of home-economics subject matter are discussed. Pertinent examples are introduced throughout the book which aid the beginner materially in meeting his own teaching problem.

One could not read the book without appreciating the worth-while material given in the appendix such as specimen score cards for meal preparation, suggestive unit instruction sheets, and lists of sources from which one may obtain helpful material.

This stimulating presentation of up-to-date material is a valuable contribution to home-economics education.

FREDA J. GERWIN WINNING

Clothing for Women, by LAURA I. BALDT. Philadelphia: J. B. Lippincott Company, 1929, 552 pages.

Teachers, students of dress design, and the homemaker alike will delight in using this revised edition of a text long known for its completeness in presenting details of dressmaking. This book presents not only the technical side of good dressmaking but also those principles of selecting the best color, material, and line for individual purpose.

Its nine color plates and three hundred and sixty-seven illustrations aid the worker in using the most up-to-date methods in construction processes. In particularly helpful and novel drawings of these processes, red lines are used to indicate stitching.

These processes are not confined to such as are used on women's clothing alone as the title might suggest but include such as are used in the home on clothing for all the members of the family from the youngest infant to father.

The chapters on drafting and draping of individual patterns are especially helpful. The illustrations of styles which are the mode

today may seem a bit old-fashioned in a few years for after all fashion is fickle. However, the principles of design and construction here set forth will be of more lasting value.

FREDA J. GERWIN WINNING

Everyman's Book of Flying, by ORVILLE H. KNEEN. New York: Frederick A. Stokes Company, 1930. Second edition, 406 pages.

The average high-school boy has now progressed so far in his knowledge of things aeronautical that he is no longer interested in a book setting forth elementary principles. For some time, he has been looking for something different in aeronautical literature; it is my impression that his desire will be satisfied with *Everyman's Book of Flying*.

This book might be described as of secondary grade in the subject and yet not so technical as to prove discouraging to the boy and girl of high-school age. Encyclopedic in scope, it is nevertheless, sufficiently in detail to give the reader an accurate knowledge of the airplane, aircraft instruments, navigation, meteorology, engines, construction details, servicing, and repairing. It contains a very thought-provoking chapter entitled "Jobs in Aviation." Many of the more recent developments in aviation have been discussed in this second edition.

ROLAND H. SPAULDING

NEWS FROM THE FIELD

SECOND ANNUAL MEETING OF THE

EASTERN SOCIOLOGICAL CONFERENCE

Yale University, New Haven, Connecticut
April 25 and 26, 1931

Saturday afternoon, April 25, 2.00 *p. m.*

General subject: The Nature and Scope of Sociology.

Papers by: Professor Theodore Abel, Columbia University
Professor Maurice R. Davie, Yale University
Professor Pitirim Sorokin, Harvard University

Saturday evening, April 25, 6.30 *p. m.*

Annual Dinner—after which members assembled in the ballroom of the club for a business session and the following addresses:

Professor H. P. Fairchild, New York University, presiding
Presidential Address, by Professor F. H. Hankins, Smith College
"Occupational Balance," by Professor T. N. Carver, Harvard University
"The Measurement of Civilization," by Professor Ellsworth Huntington, Yale University

Sunday morning, April 26, 9.30 *a. m.*

Reports on Current Researches—Mr. Robert S. Lynd, permanent secretary, Social Science Research Council, presiding.

"Investigation of Social Backgrounds," by Dr. Mildred Parten, Yale Institute of Human Relations

"Some Aspects of Social-Legal Research," by Dr. Dorothy Thomas, Yale Institute of Human Relations

"The Work of the Yale Institute," by Professor Mark A. May, executive secretary

"The Family and Personality Adjustments," by Mr. Lawrence Frank, chairman, Committee on the Family, Social Science Research Council

"Divorce and Family Desertion," by Professor L. C. Marshall, The Institute of Law, Johns Hopkins University.

CONTRIBUTORS' PAGE

Dr. A. O. Bowden, president of New Mexico State Teachers College, is a graduate of the University of Kentucky. He received his A.B. in 1908 and his A.M. in 1910 from the State University of Kentucky; his A.M. from Harvard in 1912, and his Ph.D. from Columbia University in 1928. President Bowden has had considerable experience as principal and superintendent of schools in Kentucky, Tennessee, and Montana. He held a professorship of education and philosophy at Baylor College before coming to his present position in 1922.

Professor J. Frank Day received his A.B. from the University of Utah and his A.M. and Ed.D. from the University of California. He has had wide experience as a high-school principal and county superintendent of schools in Utah. Formerly, Professor Day was director of education at the Territorial Normal School, Honolulu, T. H., and at present is dean of the faculty and director of the School of Education at the Armstrong College of Business Administration, Berkeley, California.

Dr. Ross Finney is assistant professor of educational sociology, School of Education, University of Minnesota. Professor Finney is a westerner by birth, training, and experience. His training was received at Upper Iowa, Northwestern, Chicago, and Boston Universities and received his doctorate from the latter. For a number of years he was a minister in the Methodist Church in Minnesota. He held teaching positions at Illinois Wesleyan and North Dakota State Normal before going to his present location in 1919. Dr. Finney is the author of several books.

Mr. Kenneth H. McGill holds an A.B. degree from the University of Nebraska. He was a principal in the Nebraska public high schools for a five-year period, but is now at the University of Chicago working towards a doctorate in sociology. His interest in educational sociology and in stereotypes arose while he was a high-school administrator.

Mr. Will R. Reeves received his training as organist and choral conductor in New York City and London. He was deputy scoutmaster at Yonkers, New York; army song leader, Camp Beauregard, La.; community song leader in Cincinnati; secretary of the War Camp Community Service, Cincinnati; and executive secretary, Cincinnati Community Service. At present Mr. Reeves is director of Public Recreation Commission in Cincinnati, Ohio.

ALCOHOL AND OFFSPRING. A study of all the offspring (146) of 58 men, apparently sound otherwise but admitted to a psychiatric hospital with delirium tremens and all giving a history of at least 5 years of very heavy drinking, showed only 7 psychopaths and very few other types of defect. In this case, then there was no evidence of damage to germ-plasm. Two studies by other authors are cited to the same effect; the author concludes that at present the idea that alcohol damages human heredity should be dropped from educational material.—*Paul Popenoe.* **(POHLISCH, DR. Alkohol und Nachkommenschaft.** *Internat. Rev. against Alcoholism.* **37** (6) Nov.-Dec. 1929: 332-343.)

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